

ARCHITECTURE

The PROFESSIONAL ARCHITECTURAL MONTHLY

CONTENTS

TEXT PAGES

INDUSTRIAL VILLAGES FOR PARTIALLY DISABLED SOLDIERS AND SAILORS. (Illustrated) - By <i>Thomas H. Mawson</i>	Pages 205-207
PLAN BUILDINGS NOW - - - - -	Page 207
CIVIC CENTRE FOR DAYTON, OHIO. (Illustrated) By <i>Louis Lott, Architect</i>	Pages 208-211
BUILDING THE CANTONMENTS, A RECORD FOR EFFICIENCY - - - - - By <i>Paul Starrett</i>	Pages 212, 213
THE FIRE DANGER IN WAR-WORK STRUCTURES -	Page 213
ACKNOWLEDGMENTS - - - - -	Page 213
EDITORIAL AND OTHER COMMENT: "Architecture as a Business," "Old Ideals Must Make Way for the New," "The Fourth War Loan," "Book Reviews" - - - - -	Pages 215, 216
AN EASTERN ARCHITECT'S IMPRESSIONS OF RECENT WORK IN SOUTHERN CALIFORNIA. (Illustrated) - - - - - By <i>Dwight James Baum, A. I. A.</i>	Pages 217-221
AN ENGLISH ARCHITECT'S IMPRESSIONS OF NEW YORK. (Illustrated) - - - - - By <i>T. H. Lyon</i>	Pages 222-225
LEGAL DECISIONS - - - - - By <i>John Simpson</i>	Pages 226, 228, 230

PLATES AND ILLUSTRATIONS

GARDEN WALL, ESTATE WILLIS VERNON COLE, "SHORE ACRES," MAMARONECK, N. Y. - By <i>Julius A. Gregory, Architect</i>	Page 214
--	----------

HOUSES IN CHAUCER ROAD, CAMBRIDGE, ENGLAND

Detail - - - - -	Page 226
Exterior - - - - -	Page 227
Plans - - - - -	Page 227
<i>T. H. Lyon, Architect</i>	

HOUSE, E. O. ROBINSON, COLD SPRINGS, KY. *G. C. Burroughs, Architect*

Page 229

RACQUET AND TENNIS CLUB, PARK AVENUE, NEW YORK

Exterior - - - - -	Plate CXXXVI
Main Entrance Hall - - - - -	Plate CXXXVII
Loggia - - - - -	Plate CXXXVIII
South Lounge - - - - -	Plate CXXXIX
Hall Lounge - - - - -	Plate CXXXIX
Library - - - - -	Plate CXXX
Second Floor Hall - - - - -	Plate CXXX
Tennis-Court - - - - -	Plate CXXXI
Swimming-Pool - - - - -	Plate CXXXI
Billiard-Room - - - - -	Plate CXXXII
Plans - - - - -	Plates CXXXII, CXXXIII, CXXXIV
<i>McKim, Mead & White, Architects</i>	

ENTRANCE FEATURE, McNAUGHTON RESIDENCE, LA CANADA, CALIF. - - - - -

Plate CXXXV

Reginald Johnson, Architect

FOUNTAIN FOR THE PASADENA BOARD OF TRADE, PASADENA, CALIF. - - - - -

Plate CXXXVI

Designed by Ernest Batchelder

THE DILLON MEMORIAL COMPETITION FOR THE DAVENPORT LEVEE IMPROVEMENT COMMISSION, DAVENPORT, IOWA - - - - -

Plates CXXXVII, CXXXVIII, CXXXIX, CXL
F. B. and A. Ware, Paul Schulz, Associated Architects

MEASURED DETAIL, DOORWAY, THIRD AND PENNSYLVANIA AVENUE, N. W., WASHINGTON, D. C. - - - - -

Plate CXLI

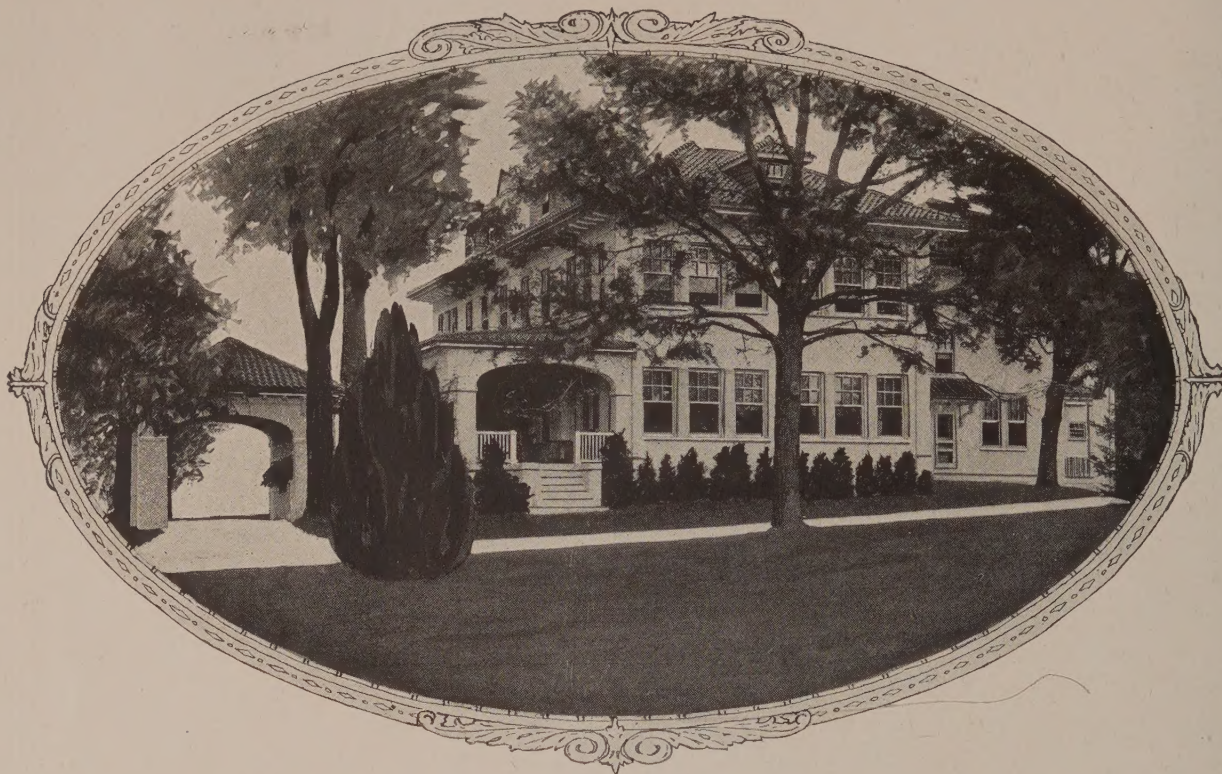
Measured and drawn by Joseph Younger

ARCHITECTURE, edited in the interest of the profession, is published the fifteenth of every month by CHARLES SCRIBNER'S SONS (Charles Scribner, President), Fifth Avenue at 48th Street, New York.

PRICE, mailed flat to any address in the United States, Mexico, or Cuba, \$5.00 per annum in advance, 50 cents a number; to Canada, \$6.00 per annum; to any foreign address, \$7.00 per annum.

ADVERTISING RATES upon request. The writing and displaying of Advertisements is an art in itself, and the publishers will be pleased to give the Advertiser the benefit of an Expert's experience in this line at no additional expense.

ENTERED at the New York Post-Office as second-class mail matter.



In the construction of a home like this one, of Mr. Geo. Gunther in Baltimore, neither pains nor price is spared to secure the very best material. And the architect, Mr. Otto G. Simonson, fully realized this when he specified for the stucco finish that lasting, gripping and [wonderfully efficient background—

BISHOPRIC BOARD

The reason Bishopric Board has attained a leading position in stucco construction is because it combines, in one product, the oldest, simplest and best principles of scientific building.

Bishopric Board is convenient and economical to handle, saves labor in applying, and requires less stucco or cement to cover than other backgrounds.

And with these economies Bishopric Board anchors and welds the stucco to the building so securely that cracking and flaking off of properly mixed and applied material are unknown.

Note the construction of Bishopric Board in illustration below,—creosoted dovetailed lath imbedded under terrific pressure in Asphalt Mastic on a background of heavy fibre-board.

The creosote preserves the lath; the dovetail locks the stucco so it can't let go; the Asphalt Mastic on the fibre-board deadens sound and is proof against vermin, water, and weather changes.

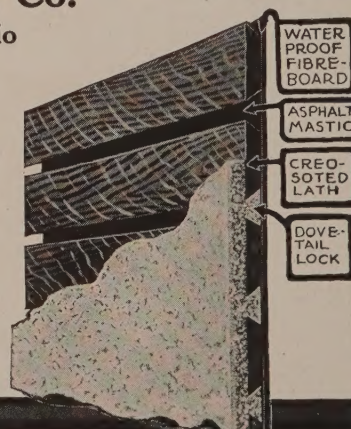
Bishopric Board satisfies owner, architect and builder, because it well and truly fulfills its purpose. Don't build a stucco house without investigating its merits.

The Bishopric Manufacturing Co.
912 Este Ave. Cincinnati, Ohio



Write for our free book, "Built on the Wisdom of Ages," illustrating homes, apartments, factory and public buildings finished in stucco on Bishopric Board. It contains letters from architects, builders and users, and extracts from reports of scientific tests. It also gives full instructions for making a stucco mixture that will last. With this book we send free samples of Bishopric Board.

Write today; investigate for yourself; be convinced.





INDUSTRIAL VILLAGES FOR PARTIALLY DISABLED SOLDIERS AND SAILORS.

"So far as may be in this world of turmoil and change, a haven of perfect peace."

ARCHITECTURE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. XXXVIII

AUGUST, 1918

No. 2

Industrial Villages for Partially Disabled Soldiers and Sailors

A Dream That Might Well Be Realized in This Country

By Thomas H. Mawson

NOTE.—This chapter from Mr. H. Mawson's interesting and suggestive book is here reprinted as pointing a possible way toward meeting our own obligation to the disabled soldiers and sailors of our returning army



I HAVE dreamed a dream, and I want you to dream it with me, and perhaps when you and I have dreamed the dream together, you may be, as I am, filled with a great desire for its realization.

It is not a new dream, and it is not one that I alone have dreamed, and the picture it has presented to each dreamer has been moulded and shaped by influences, psychological, temperamental,

and environmental, and thus is not the same.

As I said, it is not a new dream. Ever since war broke out it has been shaping in my mind, very nebulously at first, and the process of precipitation into something like a definite picture began when I first met a man in the blue suit of suffering, limping along with that look of quiet patience and conscious strength and dignity of purpose, unafraid by the terrors through which he has passed, to which we have all become sadly familiar.

Now, each time I see one of these scarred heroes in the familiar blue suit, or, perhaps more pathetic still, I see the tiny gold stripe on a khaki uniform, fresh, vigorous, and definite strokes are traced over nebulous portions of my picture, until, after two years and more spent in the drawing of it, its main outlines are complete enough to lay before you.

Indeed, a plan out of which I have evolved the one given (on page 206) has been in existence in rough pencil form for considerably over a year, and the final result crystallizes the dreaming of many odd leisure moments.

And what of this picture—what does it represent? In the foreground stands a man, not very heroic-looking, perhaps, but nevertheless a man whose eyes are open and who has seen and comprehended the crude, elemental facts at the back of life and death, of civilization and barbarism, in a way neither you nor I—poor, decrepit products of twentieth-century civilization!—can ever do, even when we stand in the presence of one going forth from this world wrapped about with the conventional manner of this conventional age.

This look in the eyes of our central figure is enough to touch the heart-strings in a manner which shall bring forth

sympathetic visions enough to enable us to complete our picture, but, great as it is, it is not the main appeal which he makes to us. It is only when we realize that it has been his high and godlike privilege to lay his sacrifices of health and strength, of powers of mind and body, of agony of effort on the altar of self-immolation on behalf of others, and that these others are ourselves, that we can hope to rise to the task before us.

This figure of a man, dauntless and unafraid, but looking forward into the future with eyes more troubled than when he looked over the stricken fields of France, may, alas! be multiplied a thousandfold, and it is the problem of removing from those eyes that troubled look, and of restoring peace of mind where we are unable to rebuild the shattered body, which sets our hearts and minds aglow with a spirit of sympathetic helpfulness. There is reason to fear that in too many cases, having flooded the heart and mind, it will be allowed to remain there only until the coming of another flood of newer, more pressing, and more self-interested thoughts, and good intentions may take the place of good deeds.

And now to fill in our dream-picture. What surroundings can we give our central figure which shall be worthy of him and shall chase away from his eyes that troubled look as he vainly tries to pierce the veil which shrouds a future overcast by the burden of a lifelong physical disability? Well, first of all, he shall not stand in the mean courts of a large town such as that into which he will inevitably drift if we do not will it otherwise, where life is drab and drear and even the light of the sun is obscured by clouds of smoke, so that green things and wild living things, in which the heart of every man who is a man delights, have taken themselves elsewhere.

No! It is not in the man-made town, though near it, but out among God's creations, in His country, that we will place our crippled soldier, and our task is to find him means of livelihood, means of mental and spiritual culture, and a place in which to live among such surroundings.

So he is taken by the hand, his prewar experiences and capacities investigated, his sympathies and aspirations consulted, and, these having all been weighed against his infirmity, he is, as speedily as possible, drafted into congenial and profitable employment—employment which shall not only be conducive to the preservation of his self-respect but profitable alike to himself and to the nation.

But, first of all, and lest I should be misunderstood, let me say that I do not for a moment think that there will be found one site for our soldiers' village—there, the secret of our vision is out!—which shall meet all requirements. Not only would sheer numbers make this impossible, but it would be cruelty, for instance, to exile a man who has grown up in the great cottonopolis of Lancashire to a cage, however beautifully gilded, in Kent or Cornwall, away from all he holds dear and all his lifelong associations.

To avoid this, the dream-picture which you and I are making may have to be reproduced many times, not by some soulless, mechanical process, but rather with ever-varying freshness of treatment to suit the different setting, so that each new and varied copy which together we are to create, shall represent, so far as may be in this world of turmoil and change, a haven of perfect peace to which such as those who have crowded into a few short months a lifetime of agony of effort ought to attain.

In some pictures of this kind which I have seen, the great army of shattered but heroic figures are all found in one position, engaged upon the same task. This, my reader, our picture will never show, for, if we think a moment, we shall realize that if it did it would be faulty in drawing and perspective. Even in the army, where, of all professions, men are drilled and schooled and uniformed into one image, there is, in fact, every gradation of personal idiosyncrasy exerting its beneficent influence even in the ranks themselves; and outside them, but still within the army, there are numberless trades and crafts and spheres of action, differing widely in kind and purpose, but all going to make up the sum total of effort in one direction. So it must be in our picture. Every man must be seen following the occupation he is best fitted for mentally, temperamentally, and physically, so that while most, no doubt, will be at physical labor of a kind fitted to their infirmities, others will be skilled craftsmen, a smaller number, perhaps, writers of books and composers of music, while a few will find their spheres in ministering to the needs of their fellows, spiritual and temporal.

Artists in their pictures strive for a quality they call "Centralization," and every text-book on art will tell you that this quality may and ought to be attained, not by a bald uniformity, but by the harmonious treatment of a sub-

ject which may in itself be very complex. This it must be evident that our picture must be, if we are to portray on one canvas men of every social and intellectual grade, and if the realization of our dream is to consist of a village and not a barracks.

It will thus be seen that there are two extremes to which we may run. On the one hand, through lack of imagination our picture may

present all its figures in the same attitude, engaged on the same task, such as toy-making or agriculture; or, on the other, flights of fancy may destroy the unity of our composition, and we may have a muddle of divergent aims and strivings after we know not what.

In the village of our dreams—the village for disabled soldiers—let us have the quality of centralization, but do not let us aim at drab

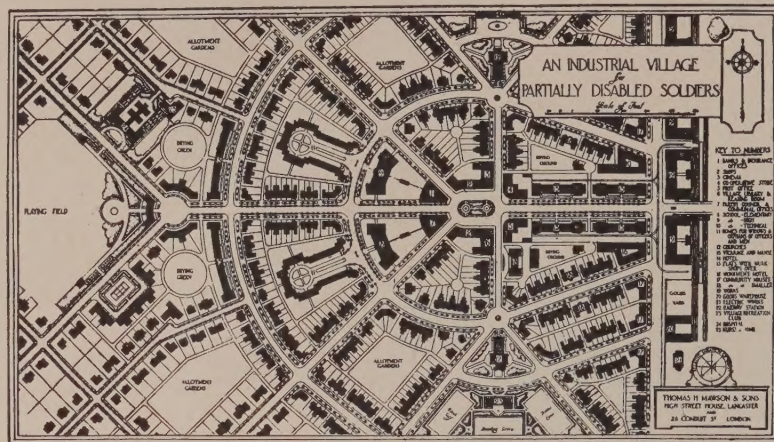
uniformity, which would be as impossible as it is undesirable. Let us rather choose some industry, some sphere of productive effort, in which the articles produced shall be of a nature that will provide a wide scope for talents, collective as well as individualistic, mechanical and inventive, literary

and artistic, and with branches suited to those who, from the nature of their infirmities, must necessarily lead a somewhat detached life, as well as for those who cannot only participate in but will glory in community of effort.

As we think of these things we find, almost before we realize it, that our dream, so nebulous at first, is beginning to take definite shape. We see before us a village, artistic as it is practical, and therefore pleasing to every sense, set down in one of the smiling valleys of this green and fertile land, wherein the villagers, drawn from every class and with every variety of temperament and diversity of training, are bound together, not only by experiences the most arduous, vivid, and perilous that human life can provide, but by their present activities and surroundings, all working together in happy collaboration, self-contained and self-respecting because they have been placed in surroundings which have lifted them out of a state

of dependence, or even in some cases of pauperization, into a position of sturdy self-helpfulness.

Is not this a happy picture, a beautiful and consoling vision which, though it approaches so nearly the ideal, is still eminently practical? We imagine a smiling valley steeped in green verdure, yet we have not forgotten that



comparatively few of our guests will be able to emulate Andrew Marvell in—

“To a green thought in a green shade,
Annihilating all that’s made,”

and for the others, as our plans and illustrations will show, we are ready to combine with rural delights those facilities for enjoyment provided by town life, such as the theatre, the cinematograph, and the social or athletic club.

For if our dream is ever to materialize we must be, before all things, intensely practical. We must dream dreams, it is true, for no venture, great or small, worthy or unworthy, was ever undertaken which was not preceded by dreaming of some sort, which later, perhaps, materialized into plans, technical drawings, or dry specifications which provided the ugly, uninteresting, intermediate stage between the beautiful dream or conception and the equally beautiful final result.

I said “equally beautiful,” but this is not enough. Our first crude conception should never materialize without undergoing much change for the better, for, as we attempt this and commence the long fight with practical details, pre-existing conditions, and ways and means, our vision should undergo a process of refinement and elaboration and be enriched, not only by many sudden inspirations which may come to us unexpectedly as we pore over our task, but still more by the happy solution of technical difficulties in a manner which makes for æsthetic betterment as well as increased practicability.

But what if our dream is denied materialization? What alternatives have we to all this?

There are two, both utterly repugnant alike to our sense

of justice and our feelings of gratitude to those broken and bruised in the birth pangs of a world in which shall dwell peace and righteousness.

One is to allow these men, to whom we owe the continuance of all we have and are, in our material surroundings at least, to eke out a miserable existence as best they can by supplementing their pensions with such casual and unskilled labor as they can find. I have heard advocates of this policy

argue that this “herding together” of large numbers of maimed and crippled men with their families in a special community would cause such daily reminders of their lifelong disabilities as would make the whole undertaking odious to them, but how much more odious will be the alternative of a lifelong struggle on the part of a crippled man with those who are able-bodied? The critics, driven from this trench, fall back upon an earthwork still more shallow—the collection of these men into

barrack-like institutions where family privacy would be difficult, movement restricted, the atmosphere vitiated, and the whole tendency be toward a bureaucratic régime of a kind most foreign to the national temperament. Such a course would, to my mind, combine all the disadvantages of my proposals and the opposite alternative, with, in addition, pauperizing elements of the most pronounced type.

No, I cannot find it in my heart to raise a single plea for either. That my scheme is not free from difficulties I am well aware; but, then, what scheme is? Our difficulties, like all others, are made to be overcome.

From “*An Imperial Obligation, Industrial Villages for Partially Disabled Soldiers and Sailors*” (London, Grant Richards; New York, Charles Scribner’s Sons), by Thomas H. Mawson, with foreword by Field-Marshal Sir Douglas Haig.



Blocks of flats with workshops for small trades above.

Plan Buildings Now

PUT it in your own words—emphasize the danger of delay. Tell the busy man that “when he is going to build” is a matter of secondary importance. *What* he is going to build is the paramount issue—NOW! Show him that it takes time, care, thought, experience, and skilled men, experts in structural, mechanical, electrical, and sanitary branches, decorators, routing engineers, men versed in modern business methods and equipment, transmission of power, and last, but not least, architectural design.

Haste, through unpreparedness, means costly errors—things forgotten, or the “cart before the horse,” commercial or architectural monstrosities, and monuments to incompetence and unpreparedness. We were unprepared for WAR, *let us be prepared for PEACE.*

Don’t confine your patriotism to *singing* “Keep the Home Fires Burning.” Sing it if you will, but **DO IT!**

Advertise *now*. Not as you had contemplated—but more, and then *more*. Tell the public why planning *now* is wisdom from your standpoint—as applied to *your* business and *your* product. There are at least a thousand reasons and you know them all. That’s why you are a leader in your line, and because you are a leader, we are appealing to you.

And those boys “over there.” They have *some big job* on their hands, and they’ll do their part, too—we *know* that. Of course, we’re busy making WAR materials for them, but their *jobs* will be gone after the war, and then they’ll want to know that we have been doing *our* part. We must make PEACE jobs for them, to take care of them—*when* they come back—not *after* they come back. They were *kids* when they went away, they’ll be MEN when they return. They’re going to do a man’s size job now. They’ll want man size jobs later—and it’s up to US to be ready for them.

You have given to the Liberty Loans—to the Red Cross—to the Y. M. C. A.—and a hundred other patriotic movements. Good!

What about your business?

Give to that! Business must pay for the war. The business “over here” for the struggle “over there.” Don’t milk it dry. Feed it.

Retrench? Yes! Give your sons? Yes! Give your money? Yes! Back Uncle Sam to the limit? Yes! But don’t forget *the bill*—and *get ready to pay it!*

The National Planning Bureau.

Civic Centre for Dayton, Ohio

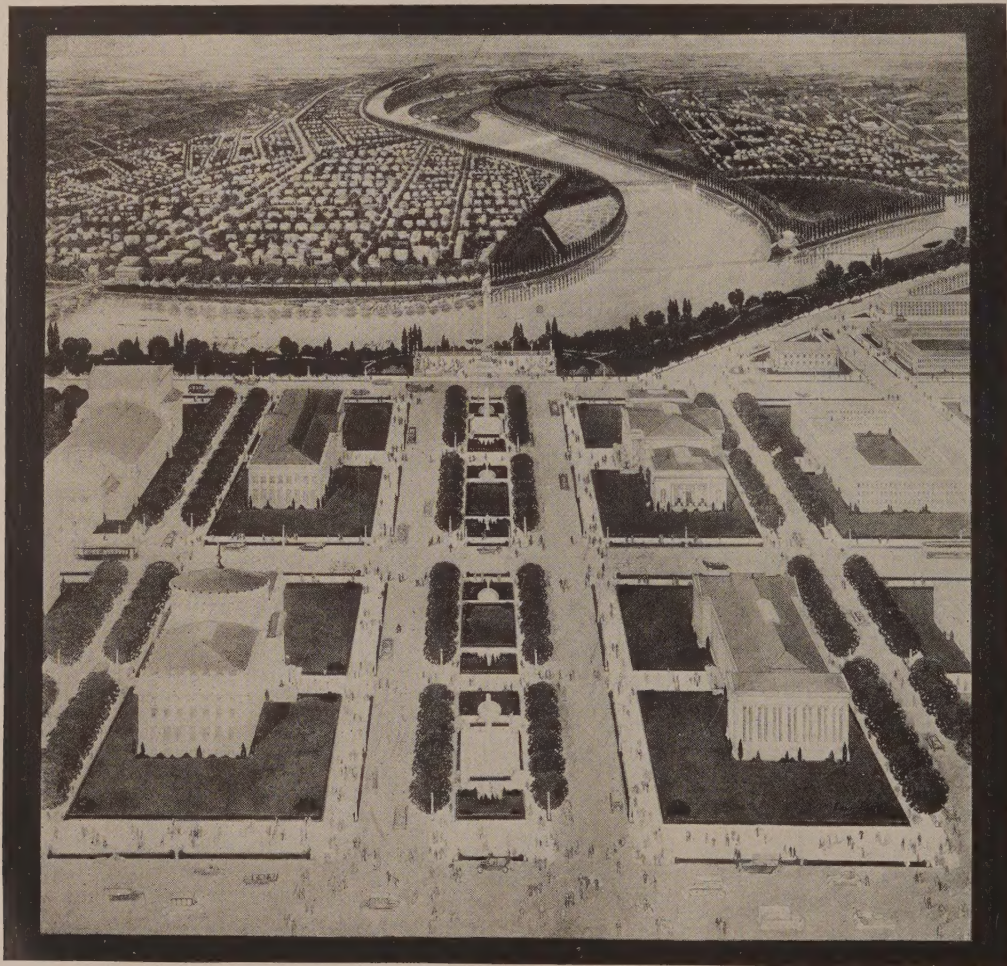
Louis Lott, Architect

THE accompanying drawings for the proposed Civic Centre of the city of Dayton, recently submitted to the City Commissioners by the City Plan Board, Mr. John F. Ohmer, chairman; Mr. Horace Irvin, vice-chairman; and Mr. Louis Lott, secretary and architect for the scheme, is the project of two years' labor by the board.

This project was started out of its course in city planning, in order to forestall any mistakes that might have

and yet in a district where realty values are comparatively low. It should be explained that Main Street is the chief through-going traffic-bearing artery north and south, and in the centre of the city, is 132 feet wide, while Third Street, the chief traffic-bearing artery east and west, is 109 feet wide. First and Second Streets, traversing the Civic Centre, are also comparatively heavy traffic-bearing streets.

The property is bounded on the east by the present

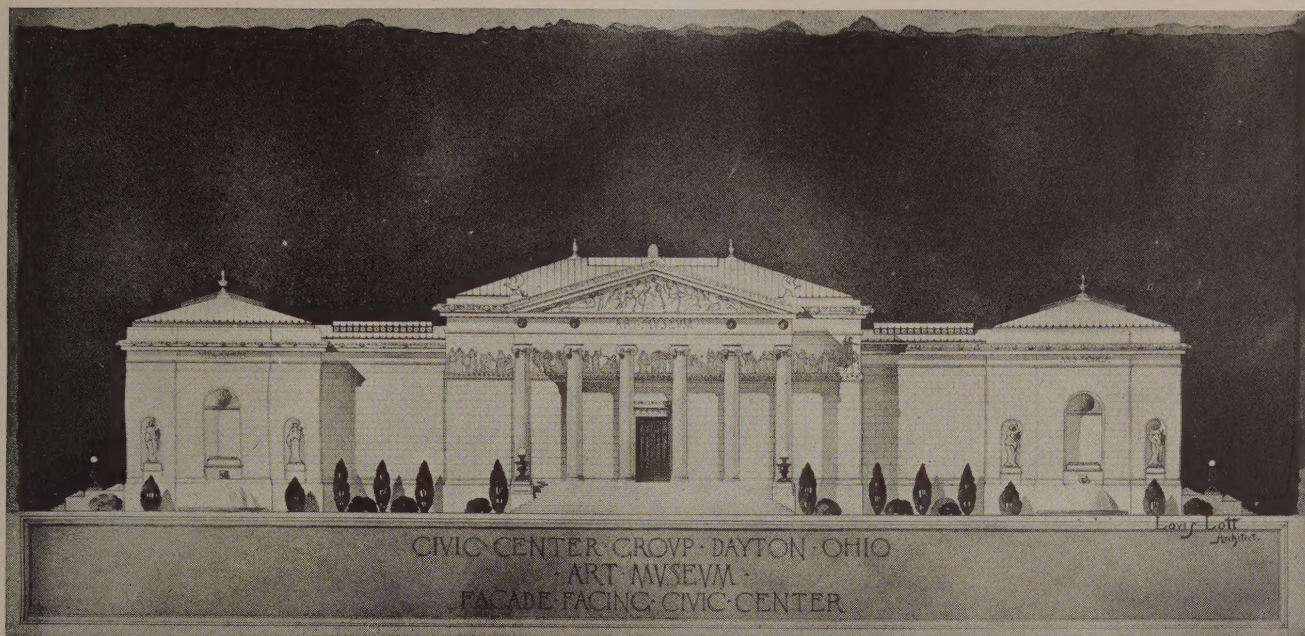


View, looking north.

been caused by ill-considered quick action due to public demand that might be made for the location of any of these public buildings, which are now either entirely lacking or inadequate.

The site chosen is in an under-developed and semi-blighted district upon property, the title for about two-fifths of which is at this time vested in the city of Dayton. The site is two blocks removed to the east from the heart of the city, that is, from the intersection of Main and Third Streets; which is sufficiently close for all practical purposes,

Miami Erie Canal, which at this time is in disuse, and may be abandoned. The district farther to the east is now partially given over to light manufacture, and in the course of time will probably entirely be taken over by this branch of industry. Aside from the advantage of a central location, the north end of the Civic Centre is bounded by the Great Miami River near its confluence with the Mad and Stillwater Rivers, which, from a picturesque point of view, will be an added advantage when the present plans of the Miami Conservancy District for the safeguarding of



the Miami River from future floods will have been completed.

Since the conservancy plans have an important part in this scheme, it should be explained that this project was

started immediately after the Dayton flood in 1913, chiefly by the citizenship of the city of Dayton, for the safeguarding of the Miami Valley, and it is due to the untiring efforts of the citizens of Dayton and especially of Mr. E. A. Deeds,



Perspective of group. Dayton Civic Centre.



Aerial perspective, looking south.

that actual operations upon this work have been begun this spring. This project includes the provision of a number of large reservoir dams above the city, and river corrections within the city.

The flow-line of the river, especially adjacent and opposite to the Civic Centre, shown on the general plan and upon the aerial perspective, is according to the conservancy plan. Upon the last two-named drawings are shown, opposite to the north end of the Civic Centre, two tracts of reclaimed territory of the old river-bed. It is proposed to use the flat segment as a huge open-air theatre and the other tract as a playground. The major portion of the large park area, shown to the north of the playground and to the east of the river, is now occupied as a government experimental aviation-field. The projecting point adjacent, called Island Park, is a municipal amusement park with facilities for boating and bathing, and the large triangular strip shown between the Stillwater and Miami Rivers is a privately owned recreation park, created for the welfare of the workers of three large factories. The creation of a boulevard along the river-front shown is part of the project and is in part in existence now. It is the intention

by a series of low dams to make the river navigable for light boating and motor-craft.

It will be seen from this that the location of the Civic Centre, when the surrounding territory has been fully developed, will, for natural beauty, be an ideal one, besides having the advantage of being very close to the heart of the city.

At the north end of the Civic Centre near the water-front and as a counterpart of the City Hall Tower, it is proposed to erect a monument in commemoration of the control of the flood waters. The City Hall Tower is intended as a landmark of Dayton.

As seen upon the alternate ground-plan, which shows the possibility of retaining the Miami Erie Canal, are shown a number of public buildings already in existence in this district.

The detail plans of the Civic Centre show the locations of the new City Hall, Court-House, Library, Art Museum, and Industrial Museum, the latter being a very desirable feature for an industrial community such as Dayton. The City Hall is located at the southern end of the Mall with the other buildings flanking both sides of the same.

The front elevation of the Art Museum gives a detailed idea of the character of architecture contemplated.

Contrary to custom, the orientation of the plans is reversed, in fact, the tops of all drawings are toward the south, excepting the bird's-eye perspective of the Civic Centre, showing the park and river areas and the territory to the north of the Civic Centre.

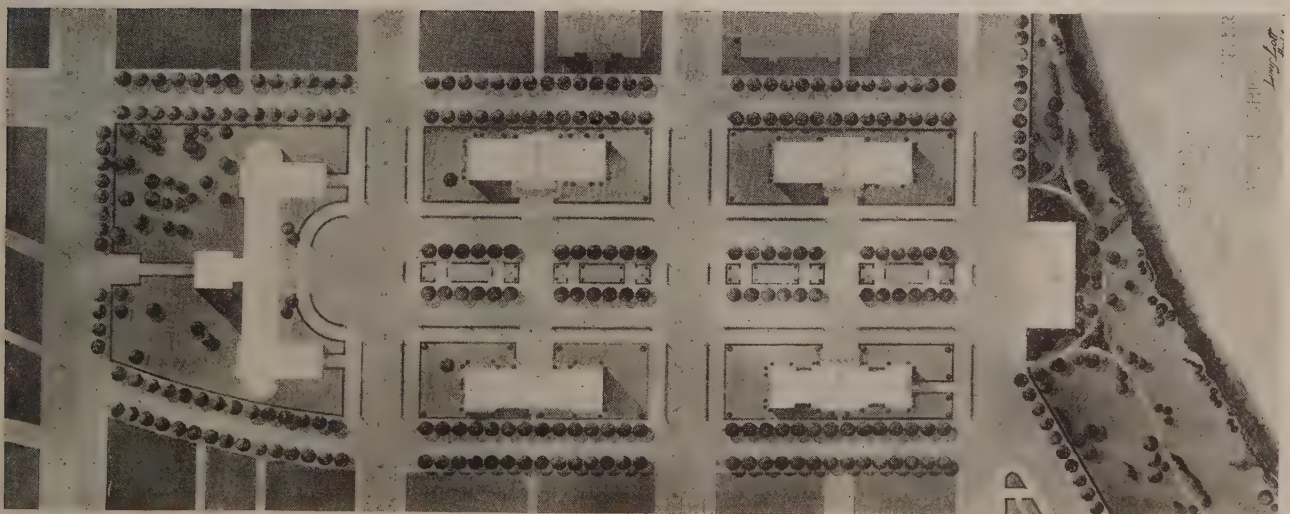
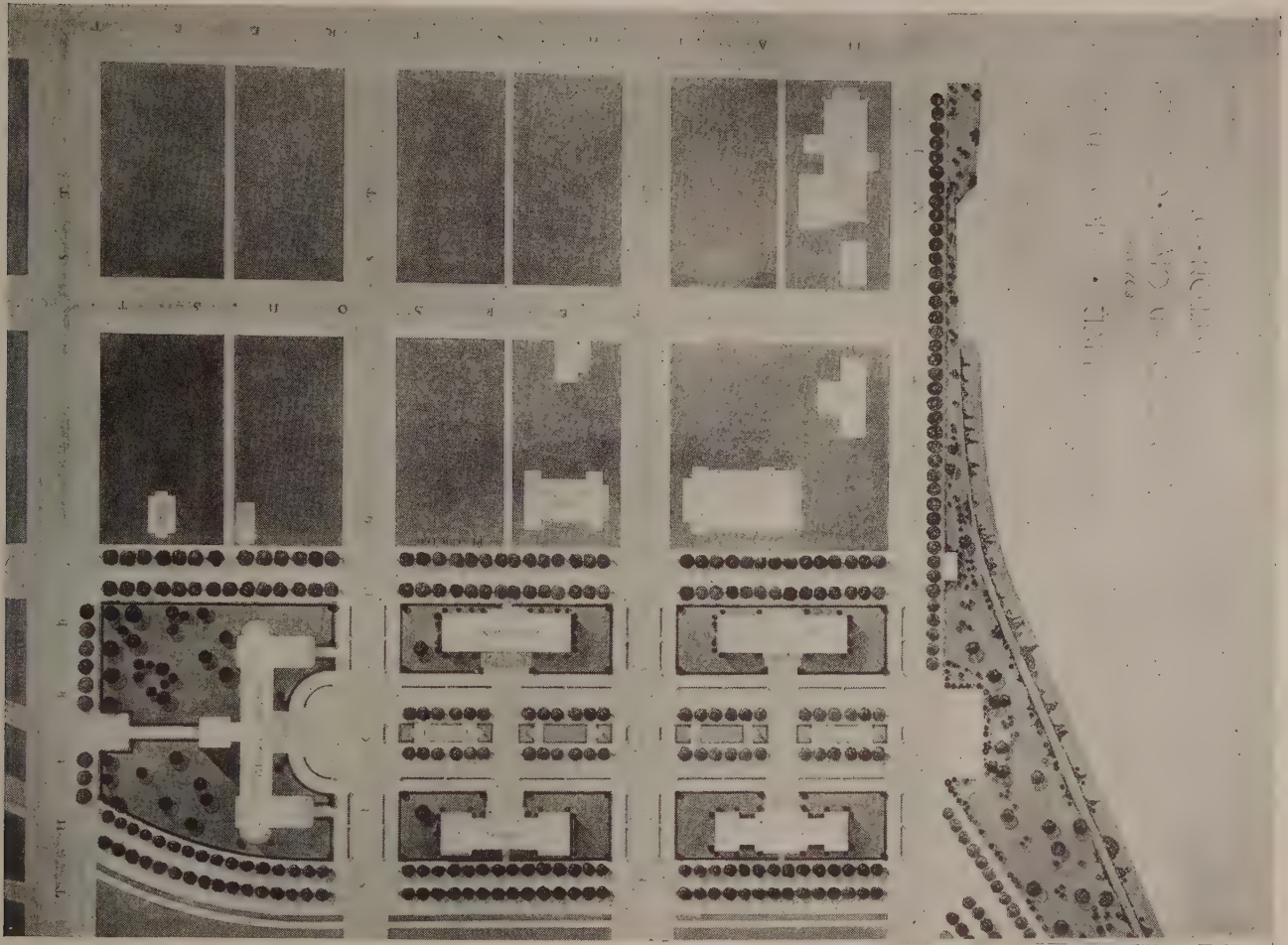
This Civic Centre project is but a part of the future plans to make Dayton, as far as possible, an ideal community, with the best possible equipment for the city to do its business in an orderly manner, and to provide such welfare features as will increase the efficiency, civic pride, welfare, and happiness of its population.

Dayton is endeavoring to lay down plans for its development for at least fifty years to come, and although war conditions prohibit a serious contemplation of executing this problem at this time, and although Ohio cities in general are unreasonably handicapped by tax laws that make the execution of any large or ambitious development schemes almost impossible under present conditions, nevertheless, all of the desirable features of Dayton's city planning will ultimately be realized.

The secretary will furnish any information desired.



Plan showing river correction, parks, and situation for proposed Civic Centre.



Building the Cantonments, a Record for Efficiency

Government Work Under Percentage Contract as Only Logical Plan, Considering the Material and Labor Market

By Paul Starrett

TO ask whether one industry or another has had fair treatment from the government is to inquire into a subject which is of very minor interest to the public, and is of small importance in comparison with the object being striven for by those in charge of the conduct of the war.

Considering the results which have been attained by the government, one cannot fail to be impressed by the courage and general good judgment which have been exercised to obtain them. It is undoubtedly true, as in all great undertakings, that the same men would avoid mistakes which have been made if they had the same problems to solve over again. The important fact is that the results have been wonderful and the men who accomplished them were patriotic and sacrificing.

In an emergency such as confronts the country it would seem good judgment to mobilize all the ability and experience available in all lines. This would call for the employment in building work, for example, of tried building organizations, allotting the work in scale with the ability, experience, and responsibility of the existing building firms. This is no time for experiments, when the lives of our soldiers depend on quick results. Therefore, however interesting it might be for an ambitious department to build up an organization to do its own building, the wisdom of so doing is questionable, as experience and training in the art of building are as important for good results as practice and study are to produce good results in any line.

The question of a plan of producing results at the lowest final cost to the government is first in importance. The two plans of contracting in ordinary civilian business are the "lump-sum" plan, where the contractor undertakes to turn over a piece of work complete for a certain fixed sum, and the "cost-plus" plan, which has several forms, but all are based on the principle of an agreed-upon fee for the service of the builder, the owner paying the cost. The lump-sum plan can only be successfully used where the owner has complete plans and specifications for his work before employing the contractor, and therefore calls for adequate time to prepare such plans and study out all the details in advance. Lump-sum work on a rising market is extremely hazardous, and no prudent contractor would undertake a contract of any magnitude under present conditions unless he were protected by a very large margin, and a margin which might have appeared adequate at the time of our entrance into the war would look ridiculous now, in view of the enormous advance in the price of building materials and the advance in the price of labor and deterioration in its efficiency.

Therefore the second plan would seem to be the only practical one under the circumstances. The situation confronting the government at the beginning of the war was one where an enormous volume of work was thrown upon it. All of this work had to be done in the shortest time possible. There was no time to get plans ready, as the requirements of the army and navy and the various manufacturing plants which had to be built entirely or added to in order to take care of the needs of the war needed careful

study, and it was necessary to start work on different enterprises in such a manner as to get the quickest completion, studying out and completing the plans as the work progressed.

In this emergency the government worked out a plan of percentage contract, which was adopted on all the cantonment contracts, whereby a sliding scale of commission was paid, the rate of commission decreasing as the size of the contract increased. A limit of \$250,000 was placed on the amount of commission a contractor could receive on one contract, and this limit was arrived at when the work amounted to \$5,000,000, which allowed the contractor 5 per cent of his work. As none of the contractor's overhead expenses could be charged under this form of contract, it can readily be seen that the profit a contractor could make was very reasonable. After the amount of the contract passed \$5,000,000 the balance of the work had to be done for no additional compensation, which resulted in each contractor performing from \$2,500,000 to \$6,000,000 worth of work for no compensation whatsoever, as the cost of these cantonments ran from \$7,500,000 to \$11,000,000 or \$12,000,000. The commission on smaller contracts was fixed at considerably less than the customary commissions paid in the ordinary contracting business before the war.

Other forms of contract were used by various branches of the government, some where larger commissions were paid, but it does not appear that in any case any more was paid than would have been in ordinary business. It is to be noted that the cantonment form of contract was available, and any contractor would have been willing to work under it.

As an illustration of the operation of the cantonment contract, the contractor for the cantonment at Fort Riley, Kansas, was given an order to proceed with the work on the 28th day of June, before the plans were completed, and a camp to take care of forty thousand men, including buildings to house the soldiers, sewerage, plumbing, heating, and power plant, with an electric lighting system, was sufficiently completed to receive the first ten thousand men on September 4, just a trifle over two months. The problem of assembling the materials and collecting the force of mechanics, numbering at one time over nine thousand, in an out-of-the-way place, and carrying out the work economically and in a wonderfully short time, is one which few appreciate.

A prominent government official has stated that there were any number of contractors who would have been glad to undertake any of the large cantonment contracts for a fee of \$50,000. This is undoubtedly true, but the cost of the completed work to the government would have been very much greater and the time of completion very much longer. A building firm properly organized for undertaking one of these large contracts would have the work half done, with their properly trained men, in less time than it would take a small contractor, unused to handling big work, to get together an organization, which at best would be experimental. Moreover, notwithstanding the fact that the government was supposed to supply all the money to carry

on the work, the contractors for the cantonment referred to above had to advance more than three-quarters of a million dollars to keep the work going, while the government officials were checking accounts and vouchers. An organization equipped to handle such a volume of business efficiently and economically, and which had the financial strength and supply of trained men to draw on to man the work, could only be built up by years of careful study and intelligent hard work.

Considerable criticism has resulted from the fact that the government has departed from the ante-bellum custom of awarding contracts only on a lump-sum basis, after the most exacting competition. In peace times this method is possible, although it is doubtful if the results have been as good as they would have been if the best contractors had been chosen instead of the cheapest.

It is impossible to make any reliable estimate of what work is going to cost under present conditions. The immense volume of work being done by the government is thrown upon the country at a time when all the young and most efficient workmen are taken out of the labor-supply. The demand for labor is so great that builders are absolutely at the mercy of the scanty supply of labor. Material prices are uncertain and constantly rising. Conditions of transportation are such that costs have increased and delays occur which have to be offset by extra effort and expense.

An effort is being made by some of the departments in Washington to adhere to the lump-sum form of contract. In the writer's judgment, if this is done generally the results will be very bad for the government for several reasons. The first-class firms will be unwilling to compete, owing to the impossibility of making any reliable estimate. Therefore the tendency will be to let the work to weaker concerns of poorer judgment, who, having very little to lose, are willing to take a chance. If they should get away with a price sufficient to do the work, it will not be done as efficiently as it would have been done by a more experienced contracting firm; and in any event the cost will be greater than if the work had been done at a reasonable fee by an experienced contractor. If the contractor finds that he has underestimated, he will be compelled to quit when his money runs out, and the government will have to step in.

As to profiteering, if exorbitant profit-making is meant by this term, it is the writer's belief that there has been none as far as the builders are concerned. Dishonest men will be found here and there in every line of business, but undoubtedly the same volume of business as was handled by the contractors of this country who built the cantonments under the cantonment form of contract has never been done in the history of the world by freemen for less profit to themselves.

From "The Evening Post," New York.

The Fire Danger in War-Work Structures

A PROMINENT builder engaged in erecting important structures for war work recently said: "I shudder when I think what might happen if fire started among that group of inflammable sheds they are building out there. It is horrible to think of any setback to the wonderful war work those people are doing. Why can't most of those buildings be fire-proof to protect the property and insure continuance of operation?"

Up to recent times definite progress seemed to have been made toward greater permanence in construction, but somehow in the rush of war work the unfounded impression seems to have arisen that in order to build quickly you must build poorly. The result has been that a number of buildings of importance have been constructed no better than a frame hut.

A rude awakening has come as a result of serious losses from fires in various localities. Natural risks alone present sufficient fire danger without considering the added menace of enemy incendiarism.

What is more important—speed need not be sacrificed in securing fire-resisting construction. With proper planning a fire-proof building can be erected as quickly as an inflammable shed. Further, all necessary materials can be locally obtained and an ample number of skilled workmen is available. As a matter of fact, it is easier to obtain labor for a fire-proof building than it is to secure the necessary carpenters for the wood structure. Remember that our government very properly is engaging all the carpenters obtainable for the vitally essential work of building ships. Concrete workers and plasterers have not been very busy, particularly so in cities, as commercial and industrial building has not been active.

Reinforced concrete and cement stucco afford an ideal fire-proof construction which can be quickly and economically erected in any locality. Also in industrial buildings steel sash should be used for window openings. Steel sash now is a stock proposition and is therefore readily obtainable.

Let us face the situation as it is and see that past mistakes are not duplicated. What is more, let us arrange to remodel many of the buildings already erected. The wood-exterior building can readily be made fire-resisting by covering with metal lath and applying stucco. The concrete exterior provides great protection from conflagrations on the outside, and will in most cases save the contents of a building. Hundreds of our buildings at the cantonments, munition works, storehouses, etc., should be protected in this way. Now is a good time to go about this, because the labor and materials are readily obtainable. As we progress farther and farther into the war, more and more of our manpower and materials will be used in the national service. It may be too late then to do the things that are readily possible now.

As for the numerous new buildings that are being planned by our busy industries, and the many industrial housing projects that are under way, let us insist upon permanence and quality in construction. We cannot, as private individuals or a nation, afford to build buildings that can be destroyed overnight, and which even at best depreciate rapidly. Fire-resisting construction quickly and economically built, should be the standard that is kept before us.

From "Modern Buildings."

Acknowledgments

CATALOGUE OF EVANS'S "ALMETAL" FIRE DOORS AND SHUTTERS AND THE "STAR" VENTILATORS. Merchant & Evans Co.

CATALOGUE OF THE WRIGHT WIRE COMPANY, Worcester, Mass.

A handsomely printed and illustrated booklet, with portraits and many illustrations of the company's various shops and special products.

HOPE'S LEAD-WORK. Henry Hope & Sons, 103 Park Avenue, New York.

A beautifully printed catalogue, including a number of examples of seventeenth and eighteenth century lead-work, most of it entirely "hand-made."



GARDEN WALL, ESTATE WILLIS VERNON COLE, "SHORE ACRES," MAMARONECK, N. Y.

Julius A. Gregory, Architect.

Editorial and Other Comment

Architecture as a Business

AN article on "Constructive Criticism," in the May number of *Architecture and Building*, by Oscar Wenderoth, formerly supervising architect of the Treasury Department and now associated with the well-known firm of Weary & Alford, Chicago, is certainly a plain-spoken statement of changing conditions. Coming from a member of the profession of Mr. Wenderoth's standing and wide experience, it will strike many as revolutionary, to say the least.

What he says about the architect's point of view I have recently heard said by several others in somewhat similar terms. To a few, no doubt, the profession has been looked upon, and always will be, as a pleasant occupation for a gentleman with nice tastes in art and adequate private means, who can delegate practical matters to others. But there are fewer of this type than formerly, and there will be still fewer as time goes on. In Mr. Wenderoth's estimation, the architect cannot justly think of himself in terms of the creative artist.

"For a long time I have believed that the architect has had the wrong point of view in considering himself purely as a professional man and in arrogating to himself a position in society beside the recognized professions—such as medicine and the law—and in trying to place himself in much the same category with painters, musicians, and sculptors.

"The architect's work is not personal in the manner of the work of those with whom he seeks to class himself. When the painter has completed a canvas; when the writer has set down the last word of his manuscript; when the composer has placed the last hieroglyphic on his score, he is finished. It may be, as in the case of the composer, that his ideas must be expressed in another medium than that which he used in recording them, but a musical composition is performed directly from the composer's score and the performances may be repeated in all their pristine freshness of inspiration long after the composer himself has "gone west." That, however, is merely a matter of method imposed by the very nature of the art of music."

The following statement, if not conforming to the old-fashioned ideas, of the functions of the architect, has the virtue of very plainly expressing the purely materialistic problems with which our age is confronted and which war has made, more acutely than ever before, an immediate problem for the profession:

"The offices in this country that have great architectural reputations do not exist solely because of the quality of their architectural work. They survive, first, because they are business-getters—regardless of their devious methods of obtaining work—and, second, because in each such organization there is a 'power behind the throne.' The 'power' is usually an engineer! He has an understanding of and an appreciation of matters architectural because he is educated and a gentleman. This is the chap who prevents the 'long-haired' contingent from sending the concern on the rocks. He is looked down upon somewhat because he is engaged in such sordid activities as directing the business

end, managing the office at a profit, discussing business matters with clients, checking bids and estimates, directing the specification writing, passing upon engineering and structural matters, adjusting costs with contractors, and doing quietly the things that to the client represent the really valuable part of the architect's service."

There is certainly no place for pretense and affectation anywhere these days, but what is true, sincere, and beautiful in the world not even wars have ever been able to put out of the minds of men. We should be blind not to realize that building is business, but let us go on striving with a closer affiliation between art and business to make even our business architecture beautiful.

May the architect still design and give us the forms of beauty, keep a place in the sun for the long-haired chap (the type in any of the arts is almost as rare as the dodo), and let him get rich by associating himself with the business-getter; the combination will be better for the architect's peace of mind and, in the long run, better for the pocketbook of the capitalists. The old slogan of "art for art's sake" seems to have become but an echo of the voice of the incompetent and futile.

"If the architects are to hold their own they must understand that before everything else they must be effective business men; that their organizations must be founded upon business principles; that it does not suffice to produce fine 'paper architecture' and to ignore or subordinate all the other elements in the service to which the client is justly entitled; that they must cease to worship the fetish of 'professionalism' and they must cease to pose as self-contained individuals rendering an exclusive personal service."

Old Ideals Must Make Way for the New

THIS war is going to make us all look on old standards with questioning eyes and minds. Old abstractions and theoretical dreams of schools and histories of art are already giving way to purely practical problems of utility and convenience, not to say of expediency.

The immediate need now is not art but reality, not ideals but action. How are we going to care for the great army of labor engaged in war work? How are we going to make ready for the thousands of men who are coming back to us maimed and in need of rehabilitation in both body and mind? How are we going to build ships fast enough, airplanes enough, to win this war? The architects everywhere are doing their bit. They are serving in every branch of the service and are co-operating with the government in every way possible.

The only new building that seems permissible under present conditions is that devoted to industrial and housing needs. We need more places for people to live in, more for men and women to work in. Our shipyards, our factories devoted to war work, our cantonments, our hospitals, rest-houses, places of recreation and convalescence, are matters of vital present interest to us all. Some of this work for obvious reasons may not be published.

France, after four years of unrelieved stress and suffer-

ing, is always thinking of the future. The rehabilitation of the devastated regions is already being planned under the direction of the French Government, with the assistance of the French architects.

France suffers, but in her suffering she does not forget to think of the future. She believes, as all the world believes, that from the present great crisis will arise a greater France, greater in the thought of sacrifice, made for a principle, greater than ever in the need for the expression of her national and spiritual ideals as expressed in her art and architecture.

May we not, also, in this time of our nation's greatest trial, sharing with France, with all our allies in present sacrifices, find with them an inspiration for better and more sincere ideals in the architecture that will follow the war?

Out of the war will arise a unified America, a nation not, as heretofore, of opposing races, but a nation under one flag and, may we hope, one language, one ideal for the betterment of the world.

Perhaps we shall see a new architecture, one imbued with the spirit of joy, as Professor A. Kingsley Porter ex-

presses the idea of beauty, an architecture of aspirations, of *sincerity* and adequately expressive of American ideals, not altogether forgetting the great traditions of the past, and yet fully realizing that our architecture should represent not the ideas of a past civilization, but that of the leadership and vitality of our own people.

Bonds of the Fourth Liberty Loan

Bonds of the Fourth Liberty Loan are now being turned out by the thousands daily by the Treasury's Bureau of Engraving and Printing. The bonds are similar in form and design to those of the Third Loan, and space has been left on each bond for insertion of the exact terms of the bonds.

It is believed that a sufficient number of the bonds will be ready to make possible immediate delivery of all bonds of the Fourth Loan as they are purchased.

Buy War Savings Stamps

Two Thoughts.—One for yourself and one for others: Save your quarters and lend them to the government.

The Fourth War Loan

Estimate of Military Expenditure for Coming Year Calls for Twenty-Four Billions—Some Interesting Figures

THE Fourth Liberty Loan will call for \$6,000,000,000. The Act which authorizes it gives authority for an issue of bonds amounting to \$8,000,000,000, which brings the total authorization of bond issues since the United States entered the war up to \$22,000,000,000.

The estimate of expenditures for the next fiscal year is \$24,000,000,000, of which two-thirds is to be raised by the sale of bonds and one-third by taxation.

Loans amounting to about \$10,000,000,000 have been provided for to our allies out of the various bond issues.

Credits and loans to foreign governments to and including June 26, 1918, were as follows: Total credits established, \$5,972,590,000; loans made, \$5,594,434,750; balance under established credits, \$378,159,250. This is made up of the following:

	CREDITS	LOANS	BALANCES
Belgium.....	\$122,800,000	\$114,100,000	\$8,700,000
Cuba.....	15,000,000	5,000,000	10,000,000
France.....	1,665,000,000	1,645,000,000	20,000,000
Great Britain.....	3,170,000,000	3,055,000,000	115,000,000
Greece.....	15,790,000		15,790,000
Italy.....	650,000,000	580,000,000	70,000,000
Russia.....	325,000,000	187,729,750	137,270,250
Serbia.....	9,000,000	7,605,000	1,395,000

The report of the Ways and Means Committee of the House of Representatives, which accompanied the new bond bill, shows final allotments during the three Liberty Loans and the amount paid into the Treasury on each on January 25, 1918:

	FINAL ALLOTMENTS	AMOUNT PAID IN
First Liberty Loan bond.....	\$2,000,000,000	\$1,986,595,200
Second Liberty bond.....	3,808,766,150	3,807,952,400
Third Liberty bond.....	4,170,019,650	3,234,327,200
Totals.....	\$9,978,785,800	\$9,028,874,800

	NUMBER OF PURCHASERS
First Liberty Loan bonds.....	4,500,000
Second Liberty Loan bonds.....	9,500,000
Third Liberty Loan bonds.....	17,000,000

From "Greater New York."

Book Reviews

THE MEANING OF ARCHITECTURE. AN ESSAY IN CONSTRUCTIVE CRITICISM. By Irving K. Pond, member of the National Institute of Arts and Letters, fellow and past president of the American Institute of Architects. Marshall Jones Company, Boston. 12mo. \$2.00 net.

In putting this book down after reading to think it over, and no one will read it and not think it over many times, there is no resisting the impression of its strong individuality and the sincerity and clarity of its argument and the conviction expressed. One might call it an analysis of the spiritual content of architecture, of art in general. "It is intended to present in definite measure the results of an earnest and constant search for the sublime essence of a spirit which has found embodiment in the great architecture of the past, an animating spirit which manifested itself in crystalline clarity in the art of the Greeks and which has continued to abide in architecture even to the present day." The book is, in fact, a logical and sequential presentation of the forms and manners in which this spirit has, in various epochs, found embodiment in architecture. The chapter headings in themselves arrest attention: "The Animating Spirit," "The Meaning of Architecture," "The Greek Expression—the Underlying Conception—the Doric," "The Greek Expression—the Ionic and Decadence," "Roman, Romanesque, and Gothic," "Origins and Illusions," "The Significance of Mass and Form," "The Element of Rhythm," "On Sculpture and Color in Architecture," "Modern Architecture Imitative—Creative," "Present-Day Ideals—an Individual Application." There isn't a chapter without some fresh and stimulating ideas.

BEYOND ARCHITECTURE. By A. Kingsley Porter. Marshall Jones Company, Boston. 12mo. Illustrated. \$2.00 net.

Professor Porter is known to all architects as perhaps the first authority on Lombardy architecture. He also has little regard for many of the accepted traditions, though he writes, not as a fault-finder, but with the purpose of pointing out very clearly why he differs from accepted opinions. With architecture as a prime topic the author has some interesting things to say about other arts, including music and literature, sculpture and painting.

There are some pertinent comments upon our wonderful art of advertising. Of a large part of our posters and display signs many of us will agree with his opinion. "The deleterious effects of the dreadful lettering, the God-awful colors, the vulgar drawing of the display signs can be hardly overestimated."

Thanks to Charles Dana Gibson and his co-war-workers, our posters are giving promise of being reformed.

THE SMALL PLACE IN LANDSCAPE ARCHITECTURE. By Elsa Rehmann. With 100 illustrations. G. P. Putnam's Sons. 8vo. \$2.50.

The volume is made up of a series of fifteen chapters by different landscape architects, giving in each instance the problem involved and its solution. The plans and photographs make the working out of the various schemes plain to the layman and afford interesting suggestions for architects and landscape designers in general.

The whole question of the placing of the house in harmonious and attractive relations with the grounds, large and small, the lines of roadways and paths, the color scheme of decorative planting are questions that need serious consideration, for many times even an unattractive house may be given charm by an attractive environment.

ANTIQUÉ MARBLES IN THE COLLECTION OF THE HISPANIC SOCIETY OF AMERICA. By J. Pijoan. With illustrations. The Hispanic Society of America, N. Y. Paper covers. 25 cents.

An Eastern Architect's Impressions of Recent Work in Southern California

Beautiful and Novel Effects in New Materials—Original Uses of Tiles, Stucco, Woodwork, and Ornamental Grilles

By Dwight James Baum, A. I. A.

IRONWORK such as grilles, railings, gates, etc., are universally used in southern California work. One of the finest collections of old Spanish ironwork outside of Spain has been assembled at the "Mission Inn" at Riverside by Mr. Frank Miller, the "Master of the Inn." Mr. Miller has men searching all over the world for art objects. In recent years Spain felt the *L'art nouveau* fever, which was most easily expressed in ironwork. The Spanish proceeded to tear out fine old examples of grilles, gates, etc., which Mr. Miller's representative bought; in all, nearly a car-load. Some of these have been sold and used on fine country homes, but the greater number have been retained and used as decorative bits at the "Mission Inn." In the main court there is an entrance to the State suite, and this has a most interesting old grille and door with a bit of tile roofing above. The old finish on the iron is of a grayish shade, more blue than black. The doorway was made to fit the old conditions and proves very interesting.



B

Other well-designed old Spanish pieces are used at the door and window of a private suite entered from the street.

Along the same street front the many large openings for the lounging-rooms all have grilles, while the balconies above have railings, sometimes of different designs, but all



Door and window to private suite, Glenwood Mission Inn.

joined in interesting ways. The delicacy of this ironwork is well worth studying, for the tendency is always to make ironwork too heavy.

On the Gillespie house at Pasadena, Mr. Goodhue, the architect, used both old and modern ironwork to give in-



Delicate ironwork, Glenwood Mission Inn.



Entrance to State suite, Glenwood Mission Inn.

terest and break up the otherwise bare and monotonous walls. This house, one of the first to follow Italian and Spanish precedents in the Southwest, still remains one of the best examples executed.

Mr. Myron Hunt, on his Fowler house at Chion, California, has probably been the most successful with modern ironwork. His work in this line possesses all the grace and delicacy of ornament and refinement of proportions had by the old work. His doorway framed by heavy stucco walls and the slender railings along the edge of the steps give a spot of color that brings out the pleasing wall surfaces. The small balcony treatment on the same house with its



Gillespie house, Pasadena. B. G. Goodhue, Architect.

graceful brackets is very successful, while the grilles on the first floor are logical, as the rooms treated that way are the master's sleeping-rooms.

Several architects and painters have had to resort to many ingenious tricks to obtain certain effects desired with the materials at hand. Mr. Elmer Grey recently designed a home for an orange-grower near Pasadena, where it was desired to obtain the effect of chestnut but with the graining in gray. There is no chestnut on the coast, so trim of California redwood was used. It was painted a nut-brown shade, then scratched to represent graining by a tool made of a board with nails driven through. This tool was moved over the painted trim with a short, curving motion, scratching the surface to a depth of approximately one-fourth inch. Then a coat of white paint was applied. Before this was dry it was rubbed in and most of the surface paint was removed, leaving an extremely interesting effect. There is an interesting pair of doors designed by Messrs. Marston and Van Pelt on a residence at Oak Knoll, Pasadena. Here they have reproduced very faithfully the aged appearance of an old Spanish door by applying several coats of paint, rubbing down between coats, and sometimes before they were dry, the finished coat being a grayish toning over a dull brown.

In the Ford house at Pasadena, by Mr. Reg-

inald Johnson, the ceiling of the loggia is of wide boards held in place by heavy beams. The wood is of Washington cedar, which is open-grained and takes stain especially well. Both the ceiling boards and beams are hand-hewn with an adze. The effect obtained by the finish applied resembles pieces of Japanese driftwood or, in part, a gray finish on Sungi wood. The wood was stained a grayish-brown, sanded lightly, then a coat of whitewash was applied. This was rubbed off after being on for about one day; the white remained on the graining and sinkages, the high spots taking a wax-like finish by the rubbing. Here also the new work has the appearance of great age, which is naturally greatly desired. Mr. Goodhue has used practically the same methods in his Santa Barbara Country Club

and the Dater residence at the same place, the ceilings of the main rooms being treated in a similar way.

Another very unusual method of using wood is in making wood grilles of turned spindles. These give a very picturesque effect to the openings, give a certain sense of security on first-story windows, and are very decorative. They are usually painted a light green with bands or stripes of yellow, or gold and red, around the turned portions at regular intervals. In the East a screen door is considered as a necessary blemish on any structure. In California they are made

decorative by a slender, grille-like treatment consisting of the same type of slender, turned-wood balusters or spindles. After turning they are sawed in two. When the frame and netting is made the halves are nailed together one on each side of the netting, giving a practical and strong screen and an interesting touch of character to the opening. The three woods most used—Washington cedar, Oregon pine, and California redwood—are all used to produce different effects in both color and texture.

The use of color is, of course, entered into with none of the timidity of Eastern architects' work. As before mentioned, most of the best work of the architects named is done in a pinkish stucco with pale-green trim, black ironwork, and red tile roofs. The effect is sunny, but not dazzling, bright and full



Residence at Oak Knoll, Calif. Marston & Van Pelt, Architects.



Wisteria design executed in tile.

of life, but not loud or in bad taste. In most cases the designs show broad, simple wall surfaces with ornate entrances, after Spanish precedent. These entrances are sometimes of terra-cotta, sometimes in cast stone, but the two most unusual seen by the writer was the simple Italian entrance done partly in sgraffito on the residence of Mr. George Kelham, architect, of San Francisco, and the well-done entrance feature in tile on the McNaughton residence at La Canada (Plate CXXXV), by Mr. Reginald Johnson, of Pasadena. These color schemes are in a sense original, and the architects deserve great credit, even considering the wonderfully clear atmosphere they have to show off their work. The domestic architecture benefits accordingly by the daring displayed, and the work has an interesting and restful note that most similar work lacks.

Another unusual material used extensively is Batchelder tile. Mr. Ernest Batchelder was a former teacher in design and had a studio on the banks of the Arroyo Seco at Pasadena. His tile-work was started in his studio-garden kiln, so he entered the building trades as a real craftsman, and he has managed to keep his art even though in close contact with business.

His tiles are all made by hand and usually modelled in the wet clay instead of the clay being pressed into moulds.

Of course the main part is in the firing as in any other well-made tile. After coming from the kiln each tile is separately treated, sanded down by hand, and when completed possesses soft, harmonious tones that blend with most any color scheme. On the McNaughton residence the main entrance is completely of this tile. The colors of grayish-green, with ivory and other tones to set out the rich ornament, are mellowed by treatment to appear as if weathered by years of exposure. The pinkish stucco walls serve to enrich the ornament, while the bit of ironwork and small window above gives an added touch to this out-of-the-ordinary doorway. The pavement and base is of the same tiles in colors that blend with both the tiling above and the stucco. Mr. Batchelder has carried his art probably the furthest in wall-fountain and fireplace work. An especially interesting example of the first is the fountain he designed for the Pasadena Board of Trade (Plate CXXXVI). The soft coloring, the treatment of the pool, the slab on which the water strikes, forcing it to trickle from there in many small streams, is all clever and well done.

A detail of the tile-work is given, showing an extra unit added over that used in the fountain, but exhibiting the clean-cut modelling appearing in all of his work.

Some very interesting wall-fountain work has been done around their wisteria design. This is probably the finest design ever executed in such materials. The coloring of the flowers—a pale wisteria—and the back—an interesting mottled gray in soft-rubbed tile—are very rich in appearance. Mr. Grey, in his Rew house at Coronado Beach, has used some novel tile, forming pilasters on each side of the mantel-piece.

This tiling lends itself to special mantelpiece designs for



Italian mantelpiece executed in tile.

fireplaces along Italian lines as shown. A special tile brick has been worked out that has a very unusual texture and form. As before stated, most of the modelling is done in the wet clay, so the ornament has a certain crispness not usually found in such work.

Several interesting gateways and doorways have been designed by Mr. Reginald Johnson. The gate shown (b) (p. 217) is made of Oregon pine, and has been hand-scraped with a coarse convex scraper, giving a very slight, wavy profile in place of the straight lines as would result from regular scraping. As there was no need to preserve the delicacy of mouldings, a slightly rough effect was obtained which expresses its purpose as a garden gate. After scraping, the wood was given a coat of white-wash, brushed off with a steel brush and a coat of asphaltum, thinned down, and finally given a coat of varnish. The resultant color was a very warm, soft gray with a brownish tone showing through here and there, giving the appearance of old weathered work.

The door shown (d) (p. 221) is of oak adzed with an ordinary foot-adze; where the rough spots occurred the splinters were slightly sandpapered. To give the same appearance, the moulding was treated with a chisel and a hollow scraper to conform in texture to the planks. The door was finished by giving it a coat of acid stain of a soft gray-brown color, and afterward several coats of oil were rubbed in. One of the interesting notes here is the large, hand-wrought nail-heads made by a local blacksmith. These were pounded out of a piece of wrought iron into a die. They were slightly roughened by hand by first soaking in sulphuric acid to start disintegration, and then oiled. The resultant tone was a haphazard color very pleasing to look at and much better than it was possible to obtain by any paint finish. The frame of the doorway is composed of an artificial stone made of rather coarse aggregate (c). The stone was rubbed with a carborundum-stone, giving it quite a coarse texture; to ac-



centuate this it was also slightly tooled by hand, and the character is shown near the left flower-pot where the reflection of the sun brings the detail out prominently. The ornament was treated similarly, with occasional use of a stone-carver's tool to make small imperfections after first using a weak solution of acid and a steel brush to clean down the material. The stucco on the job was applied in

an unusual manner and has a very interesting texture. Instead of the first coat being trowelled down it was shot on and left uneven according to the way it happened to come.

Instead of being rodded it was brushed down with an ordinary broom, which prevented all the loose parts on the top from keeping the cement from keying to the first. The second coat was then shot on with a gun and left without any hand-marking or other work being done. The coat was made very thin with just sufficient material to entirely cover the broom marks. The general effect obtained is a wavy surface, only the directions of the lines being felt. All the corners of the house are slightly rounded and left rough, giving the effect produced by a soft pencil on a sketch.

In the interesting curved-head, spindled gate shown (e) the material used was of Oregon pine resawed at the mill and wire-brushed, which eliminates the loose fibres and most of the saw marks. This was finished similar to the first gate mentioned of the same material. The wrought-iron hardware, the spindled openings and wooden dowels all give this a quaint charm.

The large gates (f) to the Ford house garage are made and finished in the same manner. Their blocky appearance and heavy strap hinges prove a very interesting contrast to the pinkish stucco walls of the job.



Tile pilaster, rear house, Coronado Beach. Elmer Grey, Architect.

Buy more W. S. S.



C



E



F

DOORS AND GATES.



D

Reginald Johnson, Architect.

An English Architect's Impressions of New York

By T. H. Lyon

UNFORTUNATELY I arrived on a wet, misty morning, so I have no first impression of New York, as seen from the sea, to record. When crossing the Upper Bay, some few days after my arrival, I came to the conclusion that the Statue of Liberty will one day be given a more imposing base. This is not high enough for the figure it supports, and the structure does not "rise out of the sea" to the extent my imagination had anticipated.

On my first evening I dined at the top of the Biltmore Hotel. I have been racking my brain for some simile which would come near to conveying the impressiveness of the effect I beheld. Countless stars of light above and deep down at incredible depths below; in the middle depth, here and there, soft streamers of smoke causing the lights to twinkle as they veiled and unveiled their brightness; the massed glow softening out into the darkness above; the sparkling brilliancy of the now apparently tiny roadway below, over which black dots moved in what appeared as one continuous "ladies' chain," an interlacing effect with a pattern as difficult to follow as that made by the gambols of the gnats; these impressions together formed a nocturne which I shall never forget. I seemed to be at last really standing in a fairy-land.

The interior of the Biltmore is lavish in spaciousness and magnificent without the least touch of vulgarity. Some bold decorative scheme, carried out with that certainty of touch which is conspicuous in all the best New York architecture, meets the eye at every turn. The careful consideration which has been given to every detail is most striking. There is delicacy of touch just where it will best tell, as, for instance, in the lift interiors; and there is broad handling where impressiveness depends upon noble dimensions. It must have been no mean task to vary treatment so that every unit is in perfect scale considered by itself and at the same time in harmony with the whole building. We are not made conscious of that sudden drop from one scale to another which is the result of applying in miniature to some minor part of a building a treatment already used in the main structure. For example, a disagreeable drop in scale would be produced by repeating, at a reduced scale in the lift doors, the treatment adopted for the main entrance. In Gothic architecture it is not uncommon to find figures at two or three different scales in the same piece of work, a

most uncomfortable arrangement and one which is a good illustration of what I mean.

If I had been asked, on my way to America, what I desired most of all to see, my reply would have been "The effect of the sky-scrapers." I came to New York convinced that I should find these most impressive, but fearing that such lofty buildings would make the streets dark and depressing. And it is only natural, if you have not visited New York, to conclude that its sky-scrapers must produce a sense of suffocation and give a gloomy aspect to its streets.

The effect I had imagined was somewhat that of a narrow way cut deep into a mountain which is never in sunshine. I found that this was an entirely wrong idea, for the streets present a most exhilarating cheerfulness under normal conditions, and are not particularly depressing even during wet weather.

In order to understand why New York accommodates itself without gloom to a skyline the loftiness of which would be intolerable in London, we must consider one of the many advantages which a city plan upon the four-square basis offers. It is obvious that where the streets run parallel to one another, and are continued without interruption right through the city, the appearance of a cul-de-sac at the end of a street is avoided. If you take the letter T, the road which forms the vertical line is never blocked by the road which forms the horizontal line; you can go straight on, north, south, east, or west, until you walk into the country or into the river. Thus a way out for the eye is presented in every direction, just as, for in-

stance, in the case of any street which leads directly down to the sea front at Brighton, in England.

The streets of New York, I believe, owe their cheerful aspect more to the fact that one always looks down long vistas into infinity than to their breadth. Such a very broad street as Park Avenue is, of course, charming, but not more cheerful than the narrowest. We feel, I think, a great sense of air space when our attention is more attracted by height than by breadth in sky area, and a sky-scraper, like the tower of a cathedral, makes us conscious of the space immediately above us. In a wide view the earth seems to bring down the sky to meet it on the horizon, and we gain the best sense of height above us by lying on our backs. A very good example of the accentuation of height, which is effected by a definite vertical line, would be ob-



Biltmore Hotel. Warren & Wetmore, Architects.

tained by placing an isolated column of great height in the middle of a very lofty building, such as Olympia, in London.

Further, the sky-scrapers do not call attention to the height of the sky above us only to make us feel the absence



Bush Terminal Building, New York. Helmle & Corbett, Architects.

of air below. The streets of New York do not produce a sensation that the air cannot reach us, such as we may have experienced when looking up the inside of a factory chimney; the effect, owing to the way out for the eye which I have described, is rather that of viewing the sky from between two gigantic vertical rocks; our attention is called to a sky area starting from an enormous height above and reaching right down to the ground level. This produces for me the exhilarating sensation that I am living in a city which is floating in air. I feel that from the end of any street it is possible to take a leap into space below commensurate with what I see above. Spaciousness does not become conspicuous as such until it is confined, for the eye takes in the size of an area best when it is bounded by clearly defined form. It is well known that the floor area of the rooms in a house, when it is only built up to the foundation level, looks much smaller than when the building is completed. In an extensive view it is rather the earth than the sky which seems abnormally vast. Thus, lofty buildings when they frame a portion of the sky call our attention to a vastness which, under normal circumstances, is, as it were, dissipated.

The sky-scrapers in conjunction with the four-square plan give to New York an impressiveness which is independent of the architectural worth of particular buildings. In regard to these I feel it almost impertinent to point out their obvious merit, and only do so as one who, having

already profited, should desire to give to others the benefit of his lesson. It is no mean task to discuss the architecture of a city in which bad work is amazingly the exception. That disastrous period in the nineteenth century, which laid so heavy a hand upon England's cities and her universities, either affected New York only in a very small degree or its productions have been demolished. I can trace, in an attempt to reduce the appearance of height by the use of horizontal lines, the hesitating acceptance of modern necessity, which marked that period when opinion must have been strongly against the sky-scraper. I can detect also, in a compromise favorable to the vertical treatment, a steadily increasing doubt as to the wisdom of such an attempt, a doubt which soon gave way to that certainty which has produced amazing triumphs in architecture.

Buildings of normal height may be divided into the "base," or ground floor, the "middle space," containing two or possibly three stories, and the "upper portion," which is sometimes accentuated by horizontal bands or by windows of smaller dimensions than those below. In all very lofty buildings the chief æsthetic difficulty lies in the treatment of an abnormally increased space between the base and the upper story. Any attempt to fill in this space by repeating, what is satisfactory there in a building of normal height, will almost certainly result in a piling up of architectural features which is wearisome in effect. Moreover, such repetition increases the weight of one component to the destruc-



Bankers Trust Building, New York. Trowbridge & Livingston, Architects.

tion of that due proportional relationship between mass values so essential to good architecture. We have only to imagine a building in which the base stonework is smooth in surface, while that of the superstructure is heavily bossed

or rusticated, to understand the importance of proportional weight.

At first sight a simple way out of this difficulty appears to lie in greatly increasing the area treated as base and upper story. Such a treatment may be extremely successful where the structure is not strikingly above the normal height, as, for instance, in Gorham's on Fifth Avenue. But in the case of very lofty buildings, although this treatment might very well restore the proportional balance in weight, the result would almost certainly be something monstrously out of scale. If our city suggests a race of giants we shall feel uncomfortably insignificant. Such buildings might be impressive, but, like many of the German military monuments, the impressiveness would be of a character crushing to brutality.

We must then discover some method of treating this increased "middle space" while adhering to what is a reasonable scale for base and upper story. In New York we shall not have to look far, for the difficulty has been solved upon the principle of a column. A column is divided into three parts, base, shaft, and capital, and in the most modern sky-scrapers we have what in mass value corresponds to these. The correct proportional value in the weight of the space between the base and upper story is maintained as in a shaft; and this is effected not only by the vertical alignment of the windows but principally by the absence of all architectural features in this portion of the building. The windows come into play only as representing a difference in surface value akin to that between the hollow and flat surfaces in fluting. I cannot forego expressing here a hope that the architects of New York will not be led into that vicious habit of ornamenting the fluting of a shaft, which not only destroys its grace but also the impressive value of base and capital.

The success with which this difficult problem has been solved is well exemplified if we note the crushing sensation produced by the horizontal-line treatment in the Flat Iron

and then turn our eyes to its neighbor the Metropolitan Life Insurance Company's building. Compare also the over-weighted effect resulting from the heavy horizontal demarcations on the Home Life Insurance Company's building in Broadway with the grace produced by the vertical accentuation in those superb

flanking towers to the Municipal Building, which are, perhaps, the very best example I have seen of the column idea. The fault of this building is that the central tower is fifty feet too low.

The successful sky-scrapers, and there are very few which are not successful, afford the eye just the rest in its journey upward which the direct and simple treatment of a shaft offers. I find myself making journeys again and again to certain streets just for the pleasurable sensation of a pastime which might be termed "eye climbing." It has become a lunch-hour treat. Stand in front of the Bush Terminal, in 42d Street, and run your eyes up that building; I think you will do it again for the sake of a feeling of lightness and exhilaration similar to that caused by a reduction in atmospheric pressure. I constantly experience this sensation on stepping out of my office in Fifth Avenue, just because,

as I do so, my attention is invariably drawn upward by the lofty buildings.

I did not believe it possible to handle such enormous masses of material and produce such perfect grace and ease until I came to New York. Some of the sky-scrapers are as simple and firm as a Doric column from the Parthenon, while others, with more elaborated base and upper story, are as graceful as an Ionic column from the Erectheum. I have a photograph before me of Broadway, looking south from the Post-Office. This is not only a splendid example

of sky area as accentuated by form, of the way out for the eye which the four-square plan offers, and also of the crushing effect of a horizontal treatment as seen on the left of the picture, but it illustrates in addition the wonderful perspectives which the sky-scrapers build up. The possibilities they afford from the point of view of architectural effect are almost



Municipal Building, New York. McKim, Mead & White, Architects.



Pennsylvania Station, New York. McKim, Mead & White, Architects.

unlimited. I can imagine domes, towers, monuments, rising one above the other, as in a city of dreams, and I ask myself what would the Statue of Liberty be if reconstructed now?

The variety in the manner of capping these lofty buildings is already immense. Compare, for instance, the Italian manner in the flanking towers of the Municipal Building with the very attractive monumental finish to No. 50 East 42d Street or the Bankers Trust Building; and again the quiet dignity of the upper story to the Grand Central Palace with the graceful elegance of that of the Biltmore.

I can only touch upon a subject which is almost inexhaustible, but no Englishman's opinion of the sky-scrapers in New York would be complete without some mention of the Woolworth Building. I wandered down-town one morning to have a look at the City Hall, for the fun of considering the question of reconstructing the clock tower, that had been gutted by fire, and be-



Woolworth Building, New York. Cass Gilbert, Architect.

hold, the Woolworth Building stood in front of me! My first impression was the "Houses of Parliament as height without length." My second set me imagining some huge Gothic cathedral of which this formed, as it were, the rood screen. I turned away, thinking it very wonderful, but not a success as a sky-scraper, and I said to myself: "What churches and what a cathedral these people might build if only they would renounce the Gothic treatment and start afresh on the lines of their commercial buildings!" I shall have something to say about the railway stations at another time, but could a finer nave to a cathedral be conceived than the centre hall of the Pennsylvania?

Since writing this I have seen the Woolworth from the elevated railway between Chambers Street and Park Place. As you round the corner between these stations it rises up like a cathedral of the imagination. Perhaps New York will one day build such a cathedral in reality.

House Building Is City Building

The Crying Need for Higher Standards

NO right judgment of the housing problem can be based on consideration only of each house by itself. From the point of view of the city as a whole, the wrongly designed houses steadily grow more serious because their number increases yearly. There is always, at first, some more profit in the large unlighted floor areas. The constant tendency in all cities is for such structures to grow in number year by year. The city gradually accumulates a mass of inferior living space. The conditions creep in without observation as they originate, and are not recognized until after long years of accrual. Then there is little hope of a remedy.

There is trouble enough in the houses that are wrong in design but right in relation to adjoining buildings. There is greater trouble in the *pauper houses* that depend on adjoining lots for their light. Buildings may be right in their design as structures but so badly located that the final results are bad buildings. If a house is placed too near either of its side lot-lines or the rear line, when the owner of the adjoining land tries to make the same use of his lot that the first man has, both houses are given serious defect. In every city there is a surprisingly large number of houses where one or more walls have been placed upon a lot-line, although the windows in the wall are the only source of light for the rooms they serve. When the owner of the adjoining lot builds or reconstructs a building, many of these lot-line windows are obliterated. Other lot-line windows have only such light as the neighboring builder is willing to provide for. The open space he is willing to leave is a free gift to the first building. Such space is seldom half what it would

have been if some open space had been provided with the first building for the permanent preservation of its light.

As a city grows in size, the men who construct the houses take a shorter and shorter interest in them. Houses are built less and less for permanent investment and more and more to sell. Working with borrowed money, as the houses grow larger, the men who shape them must turn their money over quicker. They must the more speedily free themselves from obligation in one operation to be able to take up another.

It is much better not to allow the debasing and degrading conditions to be created. In the long run, no one really profits from them. A few seem to profit during the first years. All are made to suffer afterward. Building construction in many cities is being followed like a game without rules. Many a builder has reasonable and fair standards, but a few are willing to go the limit for immediate profits.

Where there are no rules, the thoughtless and the greedy take the game into their own hands and eventually force many another person to approximate their own low standards. This is a hardship on the builders themselves as well as a most serious calamity to the public at large. High standards adhered to by every one have less hardship even to the building public than unregulated construction. When one considers apartments located wholly inside a building, he wonders where the stopping-point would be, if regulations were never established. There certainly must be a stopping-point.

From The Report of the Housing Commission, City of Des Moines, Iowa.

Houses in Chaucer Road, Cambridge, England

T. H. Lyon, Architect

THE "semidetached" plan, whereby two houses are contained under one roof, finds little favor in America. From the economical point of view this arrangement is advantageous; but it is seldom wholly satisfactory from the æsthetic standpoint, except in the case of quite small dwellings.

It is difficult, in a duplicated domestic building of considerable dimensions, so to mass the parts that weight is rightly distributed. Too often the effect produced is rather that of a weak duplication of minor features than that of a balance in weight values; in other words, these domestic buildings very frequently lack composition as that quality applies to architecture.

Further, it obviously does not follow, because two men have decided to combine their houses under one roof, that they will think alike as regards accommodation. If they do not, the æsthetic difficulty will be greatly increased.

Fortunately, in the case illustrated, the clients were in harmony as to accommodation, which made it possible to adopt a straightforward oblong plan. It is interesting to note that one of the houses possesses what is akin to an American sleeping-porch. The owner, the Reverend C. A. E. Pollock of Corpus Christi College, Cambridge, has, by adopting this feature, set an example which Englishmen would do well to follow.

The houses are built in purple and brown Luton bricks with the upper story "roughcasted." The roof tiles are similar to those which cover many an old Cambridge building. The contract sum for the block was \$17,000.



Legal Decisions of Interest to the Architect

These decisions are edited by Mr. John Simpson, the well-known lawyer

PRIVILEGED COMMUNICATIONS—WAIVER

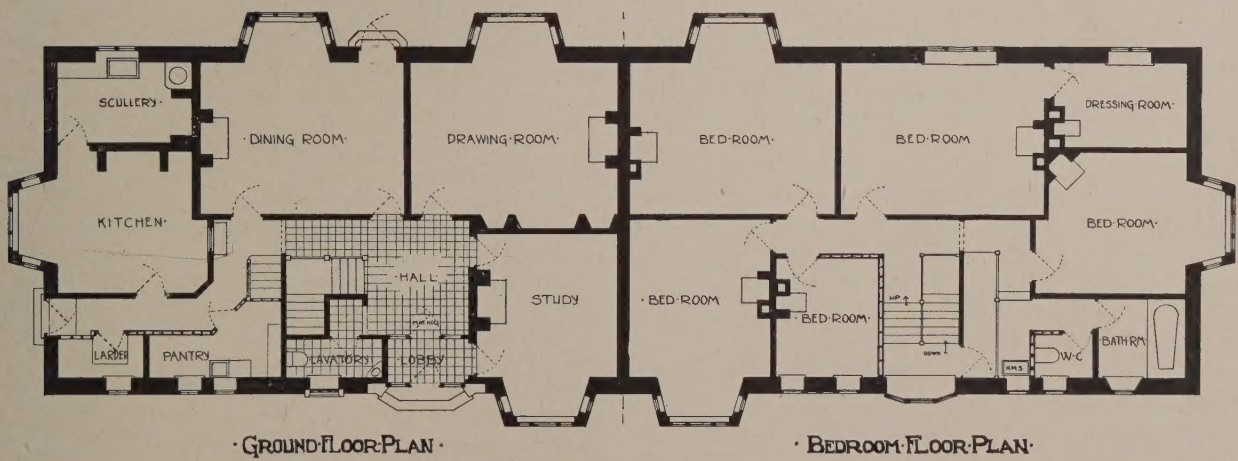
Under the Mississippi statute providing that all communications made to a physician or surgeon by a patient are privileged, and such physician or surgeon shall not be required to disclose the same in any legal proceeding except at the instance of the patient, the privilege is personal to the patient, and may be waived by him either before or at the trial. Where one of the considerations upon which an insurance policy was issued was the waiver by the insured of such privilege, the Mississippi Supreme Court held, in an action on the policy, that physicians were competent witnesses concerning the condition of his health, though they obtained their knowledge thereof while treating him professionally.—*Sovereign Camp vs. Farmer* (Miss.), 77 So. 655.

SUITS ON *Quantum Meruit*—RECOVERY OF DAMAGES

A contractor's petition for work and material, setting forth the contract, did not allege that it was not completed, but enumerated the reasonable value of the materials furnished and services rendered, at the request of the defendant, and stated the amounts sought to be charged therefor. The St. Louis Court of Appeals holds that the declaration was on

a *quantum meruit* and not on the contract. The point was taken by the defendant that recovery should be limited to the reasonable value of the work, labor, etc., not exceeding, however, "the amount sued for, together with interest from the date of institution of the suit." The court said that the point would be well taken were it a suit upon the contract; so also in cases where work has been badly done or not according to contract, or where a party has abandoned his work before completing it, in which case the party may bring his action in *quantum meruit*, and the party accepting the work must pay the reasonable value of the work received, not exceeding the contract price, if that value exceeds the damages sustained by reason of the failure of the other to complete the work agreed. But where one has a contract which the other party thereto prevents him from fully performing and is therefore in fault, the party thus prevented from completing his part of the contract may treat the contract as abandoned and sue in *quantum meruit* for what he has already done toward performance, instead of seeking damages on the contract for the breach, and in such case his recovery is not limited to the contract price.—*Joern vs. Bang* (Mo.), 200 S. W. 737.

Continued on page 228.



HOUSES IN CHAUCER ROAD, CAMBRIDGE, ENGLAND.

T. H. Lyon, Architect.

CONSTRUCTION OF BUILDING RESTRICTION

Residence property was subject to the restriction that no erection of any kind, except bay windows, verandas, porches, fences, or similar structures, should be erected on any part of the premises within 18 feet of the line of the premises. The Illinois Supreme Court holds that the erection of a wall upon a foundation 18 inches thick, extending 3 feet below the surface, supporting a wall 7 feet high, with several columns 2 feet square, capped with cement blocks, and from 7½ to 8½ feet high, constructed in part of pressed brick under a plan to convert the open space into a sunken garden, was neither a fence nor a similar structure, but a violation of the restriction which would be enjoined.—*Wolf vs. Schwill* (Ill.), 118 N. E. 414.

DELIVERY OF POSSESSION OF MATERIALS

A contracting company entered into a contract with a high-school commission for the furnishing and installing of heating and ventilating apparatus for a high-school building, which was being erected. The contract provided that if the work to be done under the agreement should be abandoned by the company, or if the contract should be assigned, or the work sublet other than as specified, or if at any time the architect should be of the opinion and should certify that performance of the contract was unnecessarily or unreasonably delayed, and that the company was violating any of the conditions or covenants, the commission should have the power to require the company to discontinue all work on three days' written notice, and that the commission might complete the contract in the manner provided by law, charging the company with the expenses, materials and labor, etc., which should be deducted from the contract price. The contracting company, which agreed to save a surety on its bond harmless, for that purpose executed an agreement reciting the assignment, transfer, and conveyance to the surety of all its title and interest in and to tools, equipment, and materials placed upon the site of the work, or which might be purchased for the work. The Federal district court for the northern district of New York holds that the mere placing of tools and equipment on the site of the building did not, on the theory that the contract with the commission was one of pledge, give the commission title to the property superior to the trustee in bankruptcy of the company, even though it is not necessary in every case that the pledgee himself take possession, for as the company remained in possession until bankruptcy, and had complete control of all the property, it could not under any theory be deemed that the commission had possession.—*In re P. J. Sullivan Co.*, 247 Fed. 139.

CONSTRUCTION OF BUILDING RESTRICTION

The Pennsylvania Supreme Court holds that a covenant in a deed that a space of 40 feet north from the line of an avenue "shall always be left open" is to be interpreted in the light of the manifest purpose of the parties, and the meaning and extent of the restriction which was within their contemplation when it was imposed must prevail.—*Dewar vs. Carson* (Pa.), 103 Atl. 343.

OWNER'S TITLE TO BUILDING MATERIAL

By a contract for constructing a building, the contractor agreed that in certain contingencies the owner might terminate the employment, enter the premises, and take possession, for the purpose of completing the work, of all materials thereon. The contingency happened. The New Jersey Court of Errors and Appeals holds that by taking

possession pursuant to the contract the owner acquired title to the material.—*Wildwood Board of Education vs. Bright* (N. J.), 103 Atl. 422.

DAMAGES FOR FAILURE TO WATERPROOF

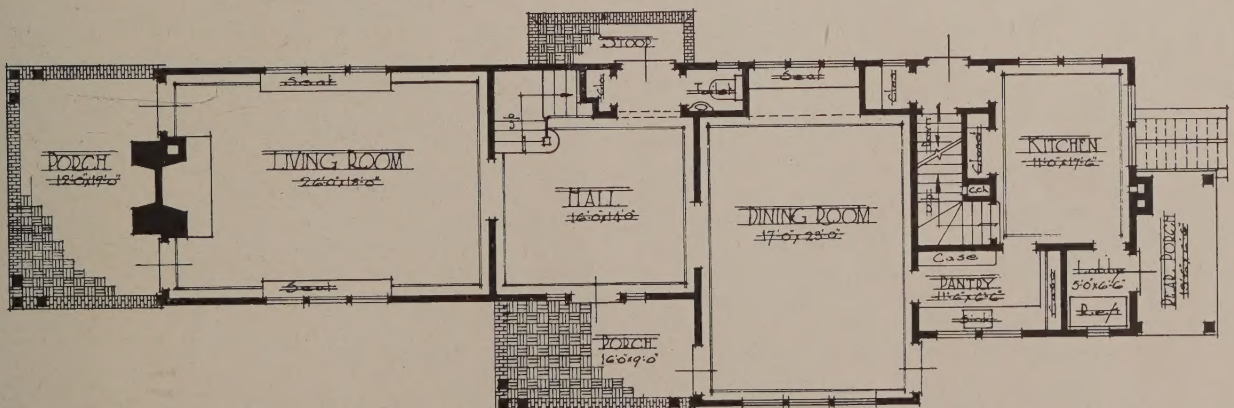
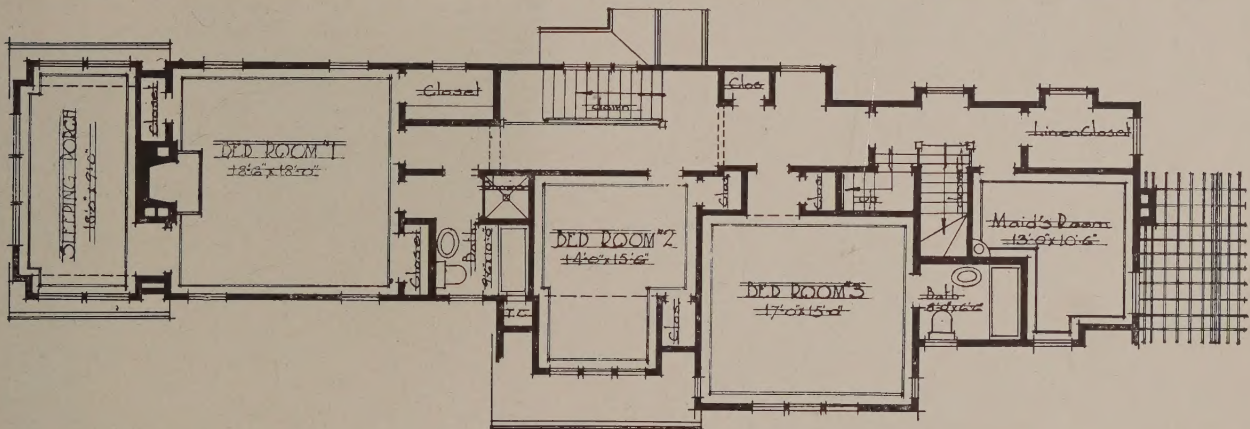
The Massachusetts Supreme Judicial Court holds that the owner of a building, suing the contractor, could recover damages to dry-goods stored in the basement, which the contractor failed to waterproof, if such damages reasonably might be supposed to have been within the contemplation of the parties at the time of making the contract had they taken thought of the consequences likely to ensue if the waterproofing were omitted.—*Dondis vs. Borden* (Mass.), 119 N. E. 184.

DEGREE OF CARE AND SKILL REQUIRED

The duty owed by an architect to his employer is that he will exercise and apply his skill and ability, judgment, and taste, reasonably and without neglect. See 2 K. C. L., p. 400; *Coombs vs. Beede*, 89 Me. 187, 36 Atl. 104. Mr. Chief Justice Peters, speaking in the *Coombs-Beede* Case, said: "The responsibility resting on an architect is essentially the same as that which rests upon the lawyer to his client, or upon the physician to his patient, or which rests upon any one to another where such pretends to possess some skill and ability in some special employment, and offers his services to the public on account of his fitness to act in the line of business for which he may be employed. The undertaking of an architect implies that he possesses skill and ability, including taste sufficient to enable him to perform the required services at least ordinarily and reasonably well, and that he will exercise and apply to the given case his skill and ability, his judgment and taste, reasonably and without neglect. But the undertaking does not imply or warrant a satisfactory result. It will be enough that any failure shall not be the fault of the architect."

In *Chapel vs. Clark*, 117 Mich. 638, 76 N. W. 62, 72 Am. St. Rep. 587, the court said: "The question was, Had plaintiff exercised that degree of care and skill and that judgment which are common to the profession or business?" The case was one in which an architect sued the owner of a building for services rendered an architect. The arrangement was by parol. The architect was also employed by the defendant to superintend the construction of the building. The suit was to recover the value of his services in drawing the plans and specifications. The defendant claimed that the plaintiff had not performed his work with due and necessary skill and care; that the plans were faulty, defective, and unskillful. Plaintiff recovered verdict and judgment. The court said the law requires only the exercise of ordinary skill and care in the light of present knowledge; that if the plans and specifications for those parts of the building which the defendant claimed were defective were in fact justified by the common knowledge upon such matters at the time and met the judgment and approval of those men ordinarily skilled and experienced in their conclusion, the plaintiff had complied with his contract. In the case of a finding of negligence by the architect, the measure of damages is an amount equal to the difference between the value of the building as actually designed and constructed and the value as it would have been if the building had been properly designed and constructed. Loss of rentals due to delays in occupying the premises are too remote and speculative to be considered.—*Bayshore Development Co. vs. Bonfoey* (Fla.), 78 So. 507.

Continued on page 230.



HOUSE AND PLANS, E. O. ROBINSON, COLD SPRINGS, KY.

G. C. Burroughs, Architect.

LIENS—SEPARATE CONTRACTS OR CONTINUING CONTRACT

In suit on mechanics' liens a steel company was allowed a lien for the balance due upon the original contract for structural steel, but was refused liens for orders subsequent to the original contract, the trial court holding that these constituted one continuing contract, and that the steel company by filing seven suits attempted to split up its cause of action. The judgment was reversed by the appellate court for the following reasons. The general rule is that materials furnished under distinct contracts cannot be mingled in one account and a lien obtained for the aggregate amount. Most of the cases in which this rule has been applied to defeat a lien action were instituted by original or subcontractors who had done work or furnished material under separate contracts, but sought to obtain a lien for everything after the time limit for filing on an earlier contract had expired by limitation by claiming the limitation began to run from the close of the account under the later contract. In other words, litigation of this kind is usually over a question as to whether the contractor who furnished materials at various times furnished them under one contract or a number of contracts, and if it were held that the latter was the case, then the materials furnished on the earlier contracts were barred by the statute limiting the time for filing liens. In the case at bar, however, if the various orders were made under separate contracts, none of the contracts would have been barred by reason of limitation. Whether orders of the kind involved in this case are separate contracts or made in one continuing contract is often very difficult to decide. The question is usually decided upon what was intended or contemplated by the parties at the time the orders were made. If a contractor keeps books, the manner in which he keeps them often throws light upon his intention to treat his orders given from time to time as separate contracts, or as one continuing contract. It was held that there was nothing in the evidence to show that the parties considered that these various orders were anything but separate contracts.—*Berkshire vs. Hall* (Mo.), 202 S. W. 414.

CONCLUSIVENESS OF ARCHITECT'S CERTIFICATE

A contract for the erection of a school building provided that if question arose as to the true meaning of the specifications, reference should be made to the architect, whose decision should be conclusive. It called for roofing without specifying three or four ply. The Arkansas Supreme Court holds that the architect's decision requiring four-ply roofing was conclusive in the absence of fraud, and the contractors could not recover the difference in cost.—*Brashears vs. Garland School Dist. No. 4* (Ark.), 202 S. W. 234.

RIGHT TO SUE ON CONTRACTORS' BONDS

The Tennessee Supreme Court holds that where a contractor on a public building gave a bond securing performance and also payment of material-men and laborers, and he defaulted in both respects, the city could sue on its own claim for the additional cost of completion, and also in behalf of the laborers and material-men whose claims were unpaid. The court said: "It seems never to have been doubted that the obligee of such bonds might bring a suit for the benefit of laborers and material-men intended to be protected by the bond. The serious question has been whether such third parties had a right themselves to sue in the absence of

statutory authority. This is a question on which the courts are divided. It is not doubted, however, in any jurisdiction where common-law practice prevails, that the obligee of a bond given to secure laborers on public works may bring suit for the use of such laborers.—*City of Bristol vs. Bostwick* (Tenn.), 202 S. W. 61.

PENALTY OR LIQUIDATED DAMAGES FOR DELAY

In determining whether a provision for a specified sum per day for every day work on a building remains uncompleted is one for liquidated damages or merely for a penalty, it is the real intention of the parties which governs. Circumstances may clearly indicate that what parties called liquidated damages they intended as a penalty or what they called a penalty they intended as liquidated damages. The probable consequence of delay, from the standpoint of the parties at the time of making the contract, is a very persuasive indication of what they intended. Where delay would probably be attended with very little loss as compared with the sum mentioned in the contract, and the actual damages could probably be very easily ascertained, the court would be inclined to the view that the parties intended to provide for a mere penalty. On the other hand, where the probable loss would be much in excess of the amount mentioned in the contract, the court would incline to the view that liquidated damages were intended to be provided for, though the parties used the term "penalty," and especially where the actual damages would be difficult of ascertainment. In a case where the probable value of the use of the building and ground greatly exceeded the \$50 per day specified in the contract, and there were liable to be matters of loss on account of delay very difficult of ascertainment, the Wisconsin Supreme Court held that the \$50 feature of the contract was intended to provide for liquidated damages.—*Grant Marble Co. v. Marshall, etc., Bank* (Wis.), 165 N. W. 14.

LIABILITY FOR INJURIES TO EMPLOYEE OF SUBCONTRACTOR

Action was brought against an owner by the employee of a subcontractor for damages for injuries resulting from the collapse of a concrete building. The building had been erected by an independent contractor. The plans and specifications were adequate and skilfully drawn. On completion the owner engaged another independent contractor to install the plumbing and heating apparatus. The plaintiff, an employee of a subcontractor of the latter, was injured while doing plumbing work by the collapse of the building. The building was constructed in early winter. At that time the work was not inherently dangerous, as proper steps could be taken to prevent the freezing of the concrete. The Indiana Appellate Court held that the plaintiff could not recover merely because of the fall of the building, without proof of the defendant's negligence on the theory of *res ipsa loquitur*, the defense that the work was being done by an independent contractor being available to the defendant.—*Looney v. Prest. O. Lite Co.* (Ind.), 117 N. E. 678.

DEDUCTION FROM CONTRACT PRICE

If a building contract is not executed in substantial compliance with its terms, it is held that the owner has the right to deduct from the contract price what it would cost him to make the building conform to the plans and specifications agreed upon.—*Schaefer v. Elser*, 202 Ill. App. 222.